

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of determining a soft material structure, comprising:

taking transmission electron microscopy images of a soft material under conditions that a plurality of crystallographically significant directions are selected in succession as incident axes of electrons,

converting the images to data ~~in~~ into electronic form,

Fourier transforming the data generated from each of the images to obtain a two-dimensional Fourier diffraction pattern from each,

from the two dimensional Fourier diffraction patterns, making a distribution of diffraction intensities on the three-dimensional reciprocal lattice points and determining a unique space group therefrom,

obtaining an origin point of space coordinates on the basis of the determined space group, and, thus,

determining directly from the Fourier-transformed data the amplitudes and phases of three-dimensional crystal structure factors, the phases being directly determined assuming weak topological object approximation,

performing inverse Fourier transforms using the determined amplitudes and phases, and

determining the structure of the soft material therefrom.

2. **(Original)** A method of determining a soft material structure as described in claim 1, wherein the transmission electron microscopy images are photographed from at least three different directions.

3. **(Original)** A method of determining a soft material structure as described in claim 1, wherein the soft material is a light element, a porous material, a combination of light elements, a combination of porous materials or a combination of a light element and a porous material.

4. **(Original)** A method of determining a soft material structure as described in claim 1, wherein the soft material is a substance selected from the group consisting of mesoporous materials, surfactants, copolymerized macromolecules, biological membranes and liquid crystals.

5. **(Original)** A method of determining a soft material structure as described in claim 3, wherein the soft material is a substance selected from the group consisting of mesoporous materials, surfactants, copolymerized macromolecules, biological membranes and liquid crystals.

6. **(Previously presented)** A method of determining a soft material structure as described in claim 1, wherein the images used to provide the data for Fourier transform are partial areas of images corresponding to no greater than 50 nm-thick parts of a sample of the soft material.

7. (Previously presented) The method of claim 1, wherein the electron microscopy images are obtained with a high-resolution transmission electron microscope.

8. (Currently amended) The method of claim 1, wherein, for diffracted waves in a region of high spatial frequency, the influence of aberration in an objective lens is reduced through estimation of the amount of defocus using a ~~Weiner~~ Wiener filter.